UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

3M Innovative Properties Company and CUNO Incorporated,

V.

REDACTED*

Plaintiffs,

MEMORANDUM OPINION AND ORDER

Civil No. 06-3540 ADM/AJB

The Clorox Company; The Brita Products Company; Brita LP; Sears, Roebuck & Company; and Pentair Filtration, Inc.,

Defendants.

Jonathan E. Singer, Esq. and Courtney Nelson Wills, Esq., Fish & Richardson PC, Minneapolis, MN, argued on behalf of Plaintiffs.

Roderick M. Thompson, Esq. and June Tai, Esq., Farella Braun & Martel LLP, San Francisco, CA; Edward M. Laine, Esq. and David A. Prange, Esq., Oppenheimer Wolff & Donnelly LLP, Minneapolis, MN, argued on behalf of Defendants; Patrick W. Bengtsson, Esq., The Clorox Company, Oakland, CA, appeared on behalf of Defendants The Clorox Company, Brita Products Company, Brita LP, and Sears, Roebuck & Company.

I. INTRODUCTION

On August 14, 2007, the undersigned United States District Judge heard oral argument on Defendants The Clorox Company ("Clorox"); The Brita Products Company and Brita LP (collectively "Brita"); Sears, Roebuck & Company ("Sears"); and Pentair Filtration, Inc.'s ("Pentair") (Clorox, Brita, and Sears collectively are "Defendants") Motion for Summary Judgment [Docket No. 46]. In their First Amended Complaint [Docket No. 41], Plaintiffs 3M Innovative Properties Company ("3M IPC") and CUNO Incorporated ("CUNO") (collectively

^{*} A sealed version of this Order was issued on December 7, 2007 [Docket No. 66]. This redacted version blacks out confidential information identified by Defendants.

"Plaintiffs") allege that Defendants infringed U.S. Patent Nos. 6,027,644 ("the '644 Patent") and 6,193,884 ("the '884 Patent"). Defendants seek a declaratory judgment of non-infringement of both the '644 and '884 Patents. Joint Answer [Docket No. 21]. For the reasons set forth below, Defendants' Motion for Summary Judgment is denied.

II. BACKGROUND

CUNO, a subsidiary of 3M Company ("3M"), designs, manufactures, and markets water filtration products for refrigerators. Mem. in Opp'n to Mot. for Summ. J. [Docket No. 54] at 3. The '644 and '884 Patents, entitled "dripless purification manifold and cartridge," cover many of the disposable refrigerator water filters sold by CUNO. <u>Id.</u> The inventors of the '644 and '884 Patents are Jan Magnusson, Allan Lonneman, and David Botts, who were affiliated with PentaPure, a company based in Eagan, Minnesota. <u>Id.</u> PentaPure was acquired by CUNO in 2004, and CUNO was acquired by 3M in 2005. <u>Id.</u> 3M IPC owns the '644 and '884 Patents (collectively "the Magnusson Patents") by assignment. <u>Id.</u> 3M IPC exclusively licenses the Magnusson Patents to CUNO. <u>Id.</u>

The '644 Patent describes a two-stage recessed filter cartridge design that engages with a corresponding protruding manifold on a refrigerator. The '644 Patent matured from U.S. Patent Application Number 08/984,893 ("the '644 application"), which was filed on December 4, 1997. Prange Aff. [Docket No. 49] Ex. 1 at 3M0013291. The patent examiner initially rejected all the claims in the '644 application as obvious under 35 U.S.C. § 103(a)¹ in light of two prior art

¹ The statute provides that "[a] patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived

references, U.S. Patent No. 5,486,288 issued to Stanford, and U.S. Patent No. 5,548,893 issued to Koelfgen. Prange Aff. Ex. 1 at 3M0013382-95. The examiner concluded in part: "It would have been obvious to one having ordinary skill in the art . . . to provide within the filter of Stanford, an inlet/outlet means comprising a two stage recess, as taught by Koelfgen, to increase the flow of fluid entering the filter cartridge." Prange Aff. Ex. 1 at 3M0013384, 3M0013387-88.

In response, the applicants amended each of the independent claims of the '644 application to include the following limitation:

the first cylindrical stage presenting a first mating surface for mating with the filter apparatus manifold and the second substantially cylindrical stage presenting a second mating surface for mating with the filter apparatus manifold, the first and second mating surfaces being substantially continuous and free of interruption by fluid seals.

Prange Aff. Ex. 1 at 3M0013400-403. The applicants explained that "[s]ince the filters are the replaceable portion of the filter assembly, it is a considerable cost benefit to form the mating surfaces continuously and to not be required to include seals in the filter structure." Prange Aff. Ex. 1 at 3M0013404. The examiner issued a notice of allowance, concluding that the new limitation defined over the prior art because the closest prior art of record—a combination of Koelfgen and Stanford—"requires the mating surfaces of the two stage recess to be interrupted by fluid seals." Prange Aff. Ex. 1 at 3M0013414-415. The '644 Patent issued on February 22, 2000.

The '884 Patent, issued on February 27, 2001, is a continuation of the '644 Patent. The prosecution history of the '884 Patent is similar to that of the '644 Patent. The examiner rejected the initial claims of the '884 application as being obvious in light of the same prior art. Prange

by the manner in which the invention was made."

Aff. Ex. 4 at 3M0000768 -79. Similar to the '644 application, the applicants amended the independent claims of the '884 patent to require "substantially continuous" mating surfaces that are "free of sealing means" or "free of interruption by fluid seals." Prange Aff. Ex. 4 at 3M00000783-84, 3M00000792-93. Based on these amendments, the examiner concluded the claims were allowable because they defined over the prior art. Prange Aff. Ex. 4 at 3M0000817-21.

In 2003, Pentair and Brita partnered together to develop and market a refrigerator water filtration system to compete with CUNO's system. Nelson Wills Decl. [Docket No. 56] Ex. 13 at 4-5. In the summer of 2006, Brita and Pentair launched the GERF-100 disposable water filter. Prange Aff. Ex. 5. The GERF-100 includes an o-ring, which is commonly used as a seal, within the filter cartridge's two-stage recess. Prange Aff. Ex. 5. Brita and Pentair have also developed a prototype filter, that includes an o-ring within the two-stage recess. Prange Aff. Ex. 6.

Plaintiffs assert that the GERF-100 (collectively "the accused products") infringe Claims 1, 2, 3, 4, 6, 7, and 8 of the '644 Patent. Pls.' Mem. in Opp'n to Mot. for Summ. J. at 6. Claims 2, 3, and 4 are dependent on Claim 1. '644 Patent at 7:8-7:22. Claim 1 is representative of the claims of the '644 Patent that Plaintiffs are asserting. Pls.' Mem. in Opp'n to Mot. for Summ. J. at 7. Claim 1 recites:

A filter cartridge for use with a filter apparatus manifold having a flow inlet and a flow outlet, the filter apparatus manifold and the filter cartridge comprising a filter apparatus when the filter cartridge is brought into operable engagement with the filter apparatus manifold, comprising:

. . .

inlet/outlet means being a two stage recess, the recess having a first cylindrical stage and

further having a second substantially cylindrical stage being concentric with the first cylindrical stage channel and the second cylindrical stage being in flow communication with the hollow flow core of the filter means, the first cylindrical stage presenting a first mating surface for mating with the filter apparatus manifold and the second substantially cylindrical stage presenting a second mating surface for mating with the filter apparatus manifold, the first and second mating surfaces being substantially continuous and free of interruption by fluid seals

'644 Patent at 6:45-6:67.

Plaintiffs assert that the accused products infringe Claims 10, 11, 12, 13, 14, and 16 of the '884 Patent. Mem. in Opp'n to Mot. for Summ. J. at 6. Claims 11, 12, and 13 depend from Claim 10, and Claim 16 depends from Claim 14. '884 Patent at 8:17-8:37, 10:4-10:6. Claim 10 is representative of the claims of the '884 Patent that Plaintiffs are asserting. Pls.' Mem. in Opp'n to Mot. for Summ. J. at 8. Claim 10 recites:

A coupling system for coupling a treatment cartridge to a manifold, the coupling system comprising:

a coupler being couplable to the manifold and being operably couplable to the treatment cartridge and having;

a coupler inlet annular recess defined about a coupler longitudinal axis, the coupler inlet annular recess presenting an annular outer wall and having a circular bottom margin, at least one inlet port being defined in the circular bottom margin displaced from the coupler longitudinal axis,

a coupler outlet annular recess defined about the coupler longitudinal axis, the coupler outlet annular recess depending from the coupler inlet annular recess circular bottom margin and presenting a coupler annular outer wall and having a circular bottom margin, at least one outlet port being defined in the circular bottom margin coincident with the coupler longitudinal axis;

at least one annular coupler interlocking member being disposed radially outward of the coupler inlet annular recess; and

the coupler presenting a plurality of mating surfaces for sealingly mating to the manifold,

the plurality of mating surfaces being substantially continuous and free of sealing means. '884 Patent at 7:59-8:16.

III. DISCUSSION

A. Summary Judgment Standard

Federal Rule of Civil Procedure 56(c) provides that summary judgment shall issue "if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c); see Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 252 (1986); Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). On a motion for summary judgment, the Court views the evidence in the light most favorable to the nonmoving party. Ludwig v. Anderson, 54 F.3d 465, 470 (8th Cir. 1995). The nonmoving party may not "rest on mere allegations or denials, but must demonstrate on the record the existence of specific facts which create a genuine issue for trial." Krenik v. County of Le Sueur, 47 F.3d 953, 957 (8th Cir. 1995).

B. Patent Infringement

An infringement analysis requires two steps: (1) claim construction to determine the scope and meaning of the asserted claims, and (2) a comparison of the properly construed claims with the allegedly infringing device to determine whether the device embodies every limitation of the claims. See Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). Claim construction is a matter of law for the court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 372 (1996). Whether the accused device infringes a claim, either literally or under the doctrine of equivalents, is a question of fact. See Insituform Techs., Inc. v. Cat

Contracting, Inc., 161 F.3d 688, 692, (Fed. Cir. 1998). Thus, to grant a motion for summary judgment based on noninfringement, the court must determine that no reasonable jury could find infringement. See IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1429 (Fed. Cir. 2000).

1. Claim Construction

In construing patent claims, courts should look first to intrinsic evidence, which includes the claims, the specification, and the prosecution history. Vitrionics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). Claim words are given their ordinary and customary meaning, which "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). However, a patentee can choose to be "his or her own lexicographer by clearly setting forth an explicit definition for a claim term." Johnson Worldwide Assocs., Inc. v. Zebco Corp., 175 F.3d 985, 989 (Fed. Cir. 1999). Claim terms "should be construed consistently with [their] appearance in other places in the same claim or other claims of the same patent." Rexnord Corp. v. The Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001). The specification is "the single best guide to the meaning of a disputed term." Vitrionics, 90 F.3d at 1582. Courts are nonetheless cautioned not to import limitations from the specification into the claims. Phillips, 415 F.3d at 1323.

If the intrinsic evidence does not resolve ambiguity in the claim terms, courts may consider extrinsic evidence such as "expert testimony, inventor testimony, dictionaries, and technical treatises and articles." <u>Vitrionics</u>, 90 F.3d at 1584; <u>Mantech Envtl. Corp. v. Hudson</u>

Envtl. Servs., Inc., 152 F.3d 1368, 1373 (Fed. Cir. 1998). Courts may "rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." Phillips, 415 F.3d at 1322-23.

a. Mating Surfaces

The first term to be interpreted is "mating surface." The phrase appears in independent Claims 1, 7, and 8, and dependent Claim 5 (which depends from Claim 1) of the '644 Patent, and the phrase appears in independent Claims 1, 10, and 14 of the '884 Patent.

Claims 1 and 5 of the '644 Patent provide representative uses of "mating surface" in the '644 Patent. Claim 1 of the '644 Patent recites an "inlet outlet means being a two stage recess . . . the first cylindrical stage presenting a first mating surface for mating with the filter apparatus manifold and the second substantially cylindrical stage presenting a second mating surface for mating with the filter apparatus manifold . . ." '644 Patent at 6:56-6:65. Claim 5 of the '644 Patent recites "[t]he filter cartridge of claim 4 having a substantially planar mating surface for mating engagement with the filter apparatus manifold, the mating surface presenting a generally circular outer margin, the recess first cylindrical stage first end opening being defined central to the mating surface and [] at least two shoulder flanges being radially outwardly disposed with respect to the outer margin of the planar mating surface." Id. at 7:23-7:30.

Defendants first propose that "mating surfaces" be construed as "those surfaces of the cartridge which fit with or mount to the manifold." Defs.' Mem. in Supp. of Mot. for Summ. J. [Docket No. 48] at 15. Defendants later propose a second definition of "mating surfaces" as "the

surfaces presented by the two stage recess that fit together or mount with the manifold." <u>Id.</u> at 21. Plaintiffs propose that "mating surface" be defined as the "the portion of the cylindrical stage that is presented to the manifold for mating." Pls.' Mem. in Opp'n to Mot. for Summ. J. at 19.

The Court adopts Defendants' first proposed definition of "mating surface" as "those surfaces of the cartridge which fit with or mount to the manifold." Defendants' second proposed definition and Plaintiffs' proposed definition of "mating surface" include only mating surfaces of the two-stage cylindrical recess. Both definitions fail to include the "substantially planar mating surface" in Claim 5 of the '644 Patent. Although Plaintiffs have not asserted Claim 5, courts "look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention." Vitrionics, 90 F.3d at 1582. Defendants' first proposed definition of "mating surface" encompasses the "substantially planar mating surface" in Claim 5 of the '644 Patent, as well as the mating surfaces presented by the first and second cylindrical stages of the two-stage recess.

Additionally, Defendants' first proposed definition of "mating surface" is more useful than Plaintiffs' proposed definition because Defendants' definition defines the word "mate" as "to fit with or mount to." This definition of "mate" is consistent with the use of the term in the '644 Patent, and it is consistent with the plain and ordinary meaning of the term. See Anchor Wall Sys. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1309 (Fed Cir. 2003) (noting that ordinary meaning of word "mate" is "to join or fit together"). Plaintiffs' proposed definition is

circular because it fails to define "mate."²

The parties do not argue that the meaning of "mating surface" is different in the '844 Patent than in the '644 Patent. Defining "mating surfaces" as "those surfaces of the cartridge which fit with or mount to the manifold" is consistent with the use of "mating surface" in Claims 1, 10, and 14 of the '884 Patent. See '884 Patent at 7:17, 7:25, 7:33-7:34, 8:13-8:15, 8:64-9:3.

b. First Cylindrical Stage

Claim 1 of the '644 Patent recites "the first cylindrical stage presenting a first mating surface for mating with the filter apparatus manifold" '644 Patent at 6:61-6:63. The parties dispute whether the mating surface presented by the first cylindrical stage includes the horizontal surface from which the second cylindrical stage depends. Plaintiffs argue Claim 3 of the '644 demonstrates that the said horizontal surface is not a "mating surface" presented by the first cylindrical stage. Claim 3 recites:

The filter cartridge of claim 1 wherein the connecting wall between the recess first cylindrical stage and recess second cylindrical stage has a tapered projection thereon, the tapered projection acting to engage a valve disposed in the filter apparatus manifold, said engagement opening said valve when the filter cartridge is brought into operable engagement with the filter apparatus manifold.

<u>Id.</u> at 7:12-7:18. Claim 8 of the '644 Patent also refers to a "connecting wall": "the second stage diameter being less than the first stage diameter and having a first end operably coupled to the second end of the first cylindrical stage by a connecting wall and having an opening being defined at the second end thereof" <u>Id.</u> at 8:32-8:37. Claim 14 of the '884 Patent uses identical language in referring to a "connecting wall." '884 Patent at 8:51-56.

² The parties have not construed the term "surface," and the Court finds it is unnecessary to do so.

Plaintiffs contend that Claim 3 of the '644 Patent shows that the horizontal "connecting wall" is between, and therefore not part of, the recess first and second cylindrical stages.

Accordingly, Plaintiffs argue that: (1) the horizontal connecting wall is not a mating surface, and (2) the horizontal connecting wall is not presented by the first cylindrical stage of the two-stage recess. Plaintiffs' first argument requires little analysis. Plaintiffs conclusorily assert that the horizontal connecting wall does not present a surface for mating. Pls.' Mem. in Opp'n at 21. However, regardless of whether the horizontal connecting wall is part of the first cylindrical stage of the two-stage recess, the horizontal connecting wall is a "mating surface" because it fits with the manifold. Plaintiffs fail to explain how the vertical cylindrical walls of the two-stage recess mate with the manifold and yet the horizontal connecting wall does not.

Plaintiffs' second argument is that the horizontal connecting wall is not presented by the first cylindrical stage of the two-stage recess. This argument requires a limited claim construction of whether the term "first cylindrical stage" includes a horizontal surface. Again, Plaintiffs rely on the language in Claim 3, which depends from Claim 1, that the connecting wall is between the first and second cylindrical stage. However, Claim 6 of the '644 Patent, which also depends from Claim 1, and Claim 9 contradict Plaintiffs' argument. Claim 6 of the '644 Patent recites:

The filter cartridge of claim 5 wherein the inlet/outlet means includes a flow inlet and a flow outlet, the flow inlet being at least one bore intersecting the recess first cylindrical stage and depending therefrom to define a depending flow passageway to the filter means, the flow outlet being defined by the recess second cylindrical stage, the recess second cylindrical stage forming a flow passageway in flow communication with the filter means.

'644 Patent at 7:31-7:38 (emphasis added); see also '644 Patent Claim 9. The illustration of the preferred embodiment in the specification of the '644 Patent makes clear that the flow inlet

"bore" intersects the horizontal surface that connects the vertical cylindrical walls of the recess first and second cylindrical stages. See '644 Patent Figure 1 (35 - inlet port). Under the plain language of Claims 6 and 9, the horizontal surface that the flow inlet bore intersects is part of the recess first cylindrical stage. This horizontal surface is the "connecting wall" referred to in Claim 3. Thus, Claim 3 and Claims 6 and 9 of the '644 Patent are inconsistent regarding whether the connecting wall is part of the first cylindrical stage: in Claim 3, the horizontal connecting wall is "between the recess first cylindrical stage and recess second cylindrical stage," whereas in Claims 6 and 9 the horizontal connecting wall is part of the recess first cylindrical stage.

"Claims are not interpreted in a vacuum, but are part of and are read in light of the specification." Slimfold Mfg. Co. v. Kinkead Indus., Inc., 810 F.2d 1113, 1116 (Fed Cir. 1987). The '644 Patent's Description of the Preferred Embodiment supports the conclusion that the horizontal connecting wall is part of the recess first cylindrical stage of the two-stage recess. For example, the preferred embodiment states that "[p]rojecting from the first of the 2 stages 36, 49 at the recess 8 is a raised, tapered projection 72 that engages the stem valve 60 with the fitting and the rotation of the cartridge 10 to the manifold 4" '644 Patent at 4:37-4:40. Figure 3 of the specification demonstrates that the "raised, tapered projection" projects from a horizontal surface. Id. Figure 3 (72 - tapered projection). Therefore, according to the specification, the first cylindrical stage of the two-stage recess contains a horizontal surface. This horizontal surface corresponds to the "connecting wall" referred to in Claim 3 of the '644 Patent.

The Court finds that the claims and the specification of the '644 Patent demonstrate that the horizontal connecting wall referred to in Claim 3 is part of the first cylindrical stage of the

two-stage recess. This limited construction of "first cylindrical stage" as including the horizontal connecting wall is also consistent with the claims of the '884 Patent. For the purpose of Defendants' Motion for Summary Judgment, it is unnecessary to further define the term "first cylindrical stage."

c. Fluid Seal

The term "fluid seal" appears in independent Claims 1, 7, and 8 of the '644 Patent. '644 Patent at 6:67, 7:59, 8:50. Plaintiffs propose that "fluid seal" be construed as "a structure that operates to seal fluid." Pls.' Mem. in Opp'n to Summ. J. at 26. Defendants contend that claim construction of "fluid seal" is unnecessary. Defs.' Reply Mem. [Docket No. 60] at 6. Instead, Defendants advocate a limited construction of "fluid seal" as including a standard o-ring. Id. at 6.

The Court finds it is necessary to construe the term "fluid seal" in order to decide

Defendants' Motion for Summary Judgment. Plaintiffs' proposed definition of "fluid seal" fails
to define "seal." Plaintiffs have provided three dictionary definitions from 1996. Courts may

"rely on dictionary definitions when construing claim terms, so long as the dictionary definition
does not contradict any definition found in or ascertained by a reading of the patent documents."

<u>Phillips</u>, 415 F.3d at 1322-23. The 1996 Merriam-Webster's Collegiate Dictionary defines
"seal" as a "tight and perfect closure (as against the passage of gas or water)." MerriamWebster's Collegiate Dictionary 1052 (10th ed. 1996). The 1996 Webster's New World College
Dictionary defines "seal" as "a tight closure, as against the passage of air or water." Webster's
New World College Dictionary 1210 (3d ed. 1996). The 1996 Random House Compact
Unabridged Dictionary defines "seal" as "anything that tightly or completely closes or secures a

thing" Random House Compact Unabridged Dictionary 1726 (Special 2d ed. 1996). The Court construes the term "fluid seal" as "a structure that operates as a tight or complete closure against the passage of a fluid." This definition is consistent with the use of the term "fluid seal" in the claims, specification, and prosecution history of the '644 Patent.

Defendants' request for a limited claim construction that the term "fluid seal" includes a standard o-ring is rejected. Defendants argue that the term "fluid seal" in the '644 Patent is a structural claim element, rather than a functional claim element. Defendants rely on Schwing GmbH v. Putzmeister Aktiengesellschaft, 305 F.3d 1318, 1324 (Fed. Cir. 2002), for the proposition that "[w]here a claim uses clear structural language, it is generally improper to interpret it as having functional requirements." However, the term "fluid seal," by itself, does not amount to clear structural language. The use of the word "seal" carries with it the ordinary meaning and function of a "seal." Under Defendants' proposal, an o-ring is automatically a "fluid seal" regardless of whether it actually performs this function in the filter cartridge. The intrinsic evidence regarding the '644 Patent does not support such a construction.

The term "fluid seal" also appears in independent Claim 14 and dependent Claim 11 (which depends from Claim 10) of the '884 Patent. The definition of "fluid seal" is the same in the '884 Patent as in the '644 Patent.

d. Sealing Means

The term "sealing means" is used in the '884 Patent in independent Claims 1 and 10, dependent Claims 2 and 9, which depend from Claim 1, and dependent 11, which depends from Claim 10. See '884 Patent at 7:9, 7:34, 7:36, 7:56, 8:16, 8:21-24. Plaintiffs contend that the term invokes the means-plus-function provision of 35 U.S.C. § 112, ¶ 6:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

"Whether certain claim language invokes 35 U.S.C. § 112, ¶ 6 is an exercise in claim construction and . . . a question of law." Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 702 (Fed. Cir. 1998). "Use of the term 'means' in a claim limitation creates a presumption that section 112, paragraph 6 has been invoked." Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1361 (Fed. Cir. 2000). However, "[t]his presumption may be overcome in two ways. First, a claim element that uses the word 'means' but recites no function corresponding to the means does not invoke § 112, ¶ 6. Second, even if the claim element specifies a function, if it also recites sufficient structure or material for performing that function, § 112, ¶ 6 does not apply." Allen Eng'g Corp. v. Bartell Indus., 299 F.3d 1336, 1347 (Fed. Cir. 2002) (quotations marks and citations omitted). In determining whether a term in a claim limitation recites sufficient structure, the court inquires into whether the "term, as the name for structure, has a reasonably well understood meaning in the art." Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed. Cir. 1996).

Here, Claim 10 recites a "sealing means," invoking the means plus function presumption. '884 Patent at 8:16. Plaintiffs contend that the function of the "sealing means" in Claim 10 is "sealing." Pls.' Mem. in Opp'n to Mot. for Summ. J. at 29. At oral argument, Defendants argued that Claim 10 does not state a function. Claim 10 recites in relevant part a "coupler presenting a plurality of mating surfaces for sealingly mating to the manifold, the plurality of mating surfaces being substantially continuous and free of sealing means." '884 Patent at 8:13-8:16. The Court finds that Claim 10 adequately recites a function—the function of a "sealing

means" is "sealing."

Plaintiffs contend that "sealing means" does not recite sufficient structure for sealing. Defendants argue, however, that the term "sealing means" invokes sufficient structure and detail to rebut the presumption that 35 U.S.C. § 112, ¶ 6 applies. Defendants rely on Cole v. Kimberly-<u>Clark Corp.</u>, 102 F.3d 524, 531 (Fed. Cir. 1996), where the Federal Circuit held that the term "perforation means" in the patent claim at issue did not trigger 35 U.S.C. § 112, ¶ 6 because the claim "describes the structure supporting the tearing function (i.e., perforations). The claim describes not only the structure that supports the tearing function, but also its location (extending from the leg band to the waist band) and extent (extending through the outer impermeable layer)." Defendants also cite Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1365 (Fed. Cir. 2000), where the Federal Circuit held that the term "baffle means" recited sufficient structure to rebut the presumption that § 112, ¶ 6 applied. Cole and Envirco Corp. are distinguishable from the instant case, however, because the term "seal" does not recite as much structure as the terms "perforation" and "baffle" did in Cole and Envirco Corp. respectively. Therefore, the Court finds that "sealing means" invokes the means-plus-function provision of 35 U.S.C. § 112, ¶ 6.

"After a court establishes that a means-plus-function limitation is at issue, it must then construe the function recited in that claim and determine what structures have been disclosed that correspond to the means for performing that function." Kemco Sales, 208 F.3d 1352, 1361 (Fed. Cir. 2000). Consistent with the construction of "fluid seals," the Court construes "sealing" as "operating as a tight or complete closure, as against the passage of a fluid." The parties agree that the corresponding structure disclosed in the '884 Patent's specification is an o-ring. Pls.'

Mem. in Opp'n to Mot. for Summ. J. at 29; Defs.' Reply Mem. at 8.

2. Infringement

Defendants seek summary judgment on Plaintiffs' allegations that Defendants' accused products infringe Claims 1, 2, 3, 4, 6, 7, and 8 of the '644 Patent, and Claims 10, 11, 12, 13, 14, and 16 of the '884 Patent.

a. The Asserted Claims of the '644 Patent

Defendants argue for summary judgment of noninfringement of the asserted claims of the '644 Patent because the mating surface of the first cylindrical stage of the two-stage recess of the accused products is interrupted by a fluid seal. The relevant portion of independent Claim 1 of the '644 Patent recites:

[A] two stage recess, the recess having a first cylindrical stage and further having a second substantially cylindrical stage being concentric with the first cylindrical stage channel . . . the first cylindrical stage presenting a first mating surface for mating with the filter apparatus manifold and the second substantially cylindrical stage presenting a second mating surface for mating with the filter apparatus manifold, the first and second mating surfaces being substantially continuous and free of interruption by fluid seals."

'644 Patent at 6:56-6:67. The only claim limitation at issue is the limitation that the mating surface of the first cylindrical stage be continuous and free of interruption by fluid seals.

Both of Defendants' accused products contain an o-ring located at the outer circumferential margin of the horizontal connecting wall of the first cylindrical stage. Having found that the mating surface of the first cylindrical stage includes the horizontal connecting wall, the Court concludes that the o-rings in the accused products interrupt the mating surface of the first cylindrical stage of the two-stage recess, and there is no genuine issue of material fact on the issue.

Therefore, Defendants' Motion for Summary Judgment turns on whether the o-ring is a

fluid seal. Defendants contend that the claim language, the patent specification, and the file history of the '644 Patent all show that o-rings are a type of "fluid seal." Plaintiffs do not dispute that o-rings can be "fluid seals." However, Plaintiffs argue that the o-rings in the Brita GERF-100 are not fluid seals because they leak under certain testing conditions. Plaintiffs have been unable to test the protoype form. Defendants contend that Plaintiffs' tests are meaningless because Plaintiffs violated established testing protocols and tested the GERF-100 at water pressures far in excess of intended operating conditions. The Court finds there is a genuine issue of material fact regarding whether the o-rings in the accused products are fluid seals. Therefore, there is a genuine issue of material fact regarding whether the accused products infringe Claim 1 of the '644 Patent.

Claims 2, 3, 4, and 6 of the '644 Patent all depend from Claim 1. Therefore, there is a genuine issue of material fact regarding whether the accused products infringe Claims 2, 3, 4, and 6. Further, independent Claims 7 and 8 of the '644 Patent both refer to "the first and second mating surfaces being substantially continuous and free of interruption by fluid seals." This language is identical to the language in Claim 1. Therefore, the Court concludes there is a genuine issue of material fact regarding whether the accused products infringe independent Claims 7 and 8 of the '644 Patent.

b. The Asserted Claims of the '884 Patent

Independent Claim 14 of '884 Patent also refers to "the first and second mating surfaces being substantially continuous and free of interruption by fluid seals." '884 Patent at 9:1-9:3. This language is identical to the language discussed above regarding the '644 Patent. There is a genuine issue of material fact regarding whether the accused products' o-rings are a fluid seal,

and therefore there is a genuine issue of material fact regarding infringement of Claim 14 and Claim 16, which depends from Claim of 14.

Independent Claim 10 of the '884 Patent recites in part a "coupler presenting a plurality of mating surfaces for sealingly mating to the manifold, the plurality of mating surfaces being substantially continuous and free of sealing means." '884 Patent at 8:13-8:16. As discussed above, "sealing means" is a means-plus-function element. To prove literal infringement of a means-plus-function claim, "the patentee must establish that the accused device employs structure identical or equivalent to the structure disclosed in the patent and that the accused device performs the identical function specified in the claim." WMS Gaming, Inc. v. Int'l Game Tech., 184 F.3d 1339, 1350 (Fed. Cir. 1999). The accused devices both incorporate an o-ring, which the parties agree is the structure disclosed in the specification of the '884 Patent.

However, for the same reason there is a genuine issue of material fact regarding whether the o-rings on the accused products are fluid seals, there is a genuine issue of material fact regarding whether the o-rings on the accused products perform the function of sealing. Therefore, there is a genuine issue of material fact regarding whether the o-rings on the accused products perform the function of sealing. Therefore, there is a genuine issue of material fact regarding whether the accused products infringe Claim 10 and Claims 11, 12, and 13, which depend from Claim 10.

IV. CONCLUSION

Based upon the foregoing, and all the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that Defendants' Motion for Summary Judgment [Docket No. 46] is **DENIED**.

BY THE COURT:

s/Ann D. Montgomery
ANN D. MONTGOMERY
U.S. DISTRICT JUDGE

Dated: December 17, 2007.